Process for the preparation of methyl formate

Abstract

The invention relates to a process for the preparation of methyl formate by reacting methanol with carbon monoxide at a pressure of from 0.5 to 10 MPa abs. and a temperature of from 50 to 150°C in the presence of a metal alkoxide as catalyst in a reactor, in which a gas stream is withdrawn from the reactor, entrained methyl formate is removed from this gas stream by condensation, and all or some of the remaining gas stream is returned to the reactor as circulating-gas stream and a mean gas superficial velocity of from 1 to 20 cm/s is set in at least one region of the reactor in which the gas flows essentially in one direction.